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| EXAMINER |
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TAYLOR II, JAMES W

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08/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|---------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/591,289 | Applicant(s) HAGER ET AL. | |
| | Examiner James W. Taylor II | Art Unit 4171 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-21,24-31 and 33-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-21,24-31 and 33-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/11/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The rejection under 35 USC 102(b) over Solutia set forth in a prior action (pp. 3-5, 4/15/2008) is withdrawn in light of applicant's amendment filed on 7/11/2008.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. New grounds of rejection are set forth hereunder. Thus, the following action is made non-final.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. However, a certified English translation of said papers has not been received. Due to an intervening reference (see below), priority is hereby denied until the rejection below based upon the intervening reference is withdrawn or until a certified English translation of said papers is filed so the examiner can ensure 35 USC 112, 1st support for the instant application and claims.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Obvious Double Patenting Provisional Rejection I

5. Claims 19-40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 38-57 of copending Application No. 10/544041.

6. The instant application claims a polymer matrix, admixed with a nanoscale light-sensitive metal oxide. The copending application is mainly differentiated by its extra component: a dye in the polymer matrix. It would have been obvious at the time of invention to add a dye to the formulation presented in the instant application to change the tint the resulting product of the formulation. Further, the instant application has been amended so that the independent claim necessitates the amount of metal oxide to be between 0.001 and 0.01 wt. % of the composition. Given that the amount of metal oxide would be expected to affect the properties of the plastic material into which it is incorporated, it is evident that said amount is a result effective variable. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to select

concentration of metal oxide in the copending application as there are no unexpected results. As such, the present claims are rendered obvious over the copending application's claims.

7. This is a provisional obviousness-type double patenting rejection.

8. Claims 19-40 are directed to an invention not patentably distinct from claims 38-57 of commonly assigned 10/544041, similar as noted above.

9. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/544041, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

10. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Obvious Double Patenting Provisional Rejection II

11. Claims 19-40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-25 of copending Application No. 11/368602.

12. The instant application claims a polymer matrix, admixed with a nanoscale light-sensitive metal oxide. The claims of the copending application aforementioned claim a plastic molded body in terms of its composition, which is the same composition claimed in the instant application, except in the copending application, there is one added physical limitation ("plastic material and the metal oxides are transparent to laser light with a wavelength of 300-1300 nm"). The examiner takes the position that because the elements are the same (note from the dependent claims the metal oxides presented are indium-tin oxide as antimony-tin oxide in both applications, the particles sizes are similar, and the polymer matrices are similar), the aforementioned physical limitation would be met. Since both sets of claims recite similar plastic materials and nanoscale metal oxides, it is evident that the properties of these materials, such as transparency to 300-1300 nm laser light as recited in the copending applications, would also be intrinsic to the corresponding ingredients in the present claims. As such, the present claims are rendered obvious over the copending application's claims.

13. This is a provisional obviousness-type double patenting rejection.

14. Claims 19-40 are directed to an invention not patentably distinct from claims 22-25 of commonly assigned 11/368602, similar as noted above.

15. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP

Chapter 2300). Commonly assigned 11/368602, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

16. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Objections

17. Claims 19-21, 24-31, 33-40 are objected to because of the following informalities: claims 19 and 35 state, “wherein said metal oxide comprises 0.001 to 0.01 weight-percent of said plastic material”. This is inappropriate use of the term comprising (i.e., the whole comprises a part; the part does not comprise the whole). The examiner suggests changing this limitation to “wherein said metal oxide is 0.001 to 0.01 weight-percent relative of the total weight of said plastic material”.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

19. Claims 19-21, 24-31, and 33-40 are rejected under 35 U.S.C. 102(a) as being anticipated by DE202004003362U.

20. DE202004003362U teaches a plastic matrix (par. 1) and 0.001 to 0.01 wt. % (par. 22) of a nanoscale (par. 21) light-sensitive metal oxide (par. 1). Doped and non-doped indium-tin oxide (including blue and yellow) and antimony-tin oxide can be used (par. 25) as the metal oxide. Several polymer matrices can be used (pars. 30 and 34) such as poly(meth)acrylate, polyamide, polymethyl methacrylate, bisphenol-A-polycarbonate, etc. The prior art teaches an inscribed image in a product (ex. 4). The composition can be made under high shear (par. 39) and via master batch (par. 38). The composition is laser weldable (par. 1).

21. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

22. Claims 19-21, 27-30, 34, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2003-246132A.

23. JP2003-246132A teaches a porous thermoplastic printing material (ti.) comprising a plastic matrix (ab., par. 4) and 1 to 40 wt. % (par. 7) of a nanoscale (corresponding to "0.010-200-micrometer thing," par. 7) light-sensitive metal-oxide-coated mica (ab., pars. 4 and 7). As the amount of metal-oxide-coated mica present in the composition would be expected to directly contribute to the amount of absorbed IR radiation for the composition, it is a result effective variable. As such, it would have been obvious at the time of the invention to one of ordinary skill in the art to optimize the amount of metal-oxide-coated mica to control the final optical characteristics of the thermoplastic printing material.

24. Regarding claim 20, the metal-oxide-coated mica particle size is 0.010-200 micrometers (cited above). The claimed range would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that claiming an over lapping portion of the range taught in the prior is a *prima facie* case of obviousness. See *In re Malagari*, 182 USPQ 549.

25. Regarding claim 21, the metal-oxide-coated mica particle size is 0.010-200 micrometers (cited above). It has been held that a range of "more than 5%" would overlap a disclosure of 1-5%. See *In re Wertheim*, 541 F. d. 257, 191 USPQ (CCPA 1976) and *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d. 1934 (Fed. Cir. 1990). The claimed range would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that claiming an over lapping portion of the range taught in the prior is a *prima facie* case of obviousness. See *In re Malagari*, 182 USPQ 549.

26. Regarding claims 27-30, the choice of plastic material is not particularly limited. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use any plastic material, given no unexpected results, as they would behave as functional equivalents.

27. Regarding claim 34, a YAG laser is used to create a printed body (par. 10).

28. Regarding claim 35, kneaders are used to mix the composition (par. 12).

29. Regarding claim 37, masterbatches and premixtures are used make concentrated solutions that can be stored and diluted to make a product composition later, during processing. Using masterbatches and premixtures is beneficial in that it allows one to perform some of the processing and the rest later. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a premixture or masterbatch to store a high-concentration metal-oxide-coated mica and matrix mixture.

30. Claims 19-21, 24-26, 31, 35, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solutia, Inc. (WO 02/060988) in view of Sigma Aldrich (Figure 1, screenshot of website, 3/28/2008).

31. Solutia teaches a plastic matrix (corresponding to "a polyvinyl butyral composition," p. 8, l. 28; p. 9, l. 6) and a nanoscale (p. 5, l. 21-25) light-sensitive metal oxide (corresponding to "antimony tin oxide" and "indium tin oxide," p. 8, l. 29; p. 9, l. 7). The examiner takes the position that because the applicant's system is physically similar to Solutia's system, the applicant's claim that the plastic material is laser-markable and laser-weldable with both inherently be met by Solutia.

32. The applicant further limits the light-sensitive particle to 0.001% to 0.01% by weight of the formulation. Solutia fails to teach this range of metal oxide particles. Sigma-Aldrich's website shows current prices for indium-tin-oxide nanoparticles. They are very economically expensive. Given that the amount of indium-tin-oxide nanoparticles control the amount of IR radiation absorbed in the composition, the amount of indium-in-oxide present is a result effective variable. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to optimize the amount of indium-tin-oxide nanoparticles present to lower the economic cost of producing the formulation while maintaining acceptable IR absorption.

33. Regarding claims 20-21, and 31, the metal oxide has a particle size of 5 to 100 nm, p. 5, l. 25).

34. Regarding claim 26, Solutia teaches indium-tin oxide but fails to explicitly mention blue indium-tin oxide. Given that there is a small, mutually-exclusive, mutually-exhaustive list consisting of the types of indium-tin oxide—yellow (stoichiometric) and blue (non-stoichiometric)—for one with ordinary skill in the art, it would have been obvious to try using blue indium-tin oxide.

35. Regarding claim 35, the applicants claim mixing the metal oxide with the plastic matrix (p. 8, l. 28 to p. 9 l. 2; p. 8, ll.16-17) under high shear. Solutia fails to explicitly teach "high shear". Solutia does state the plastic matrix with metal oxide additives are "blended in a Brabender mixer." Blending implies the presence of high shear.

Therefore, high shear is inherent in Solutia.

36. Regarding claim 37, Solutia discloses (pg. 9, ll. 7-8) a "30-percent dispersion of indium tin oxide in triethyleneglycol bis(2-ethylhexanoate)", which is a pre-mixture.

37. Regarding claim 39, the examiner notes that lanthanum hexaboride is blue/violet in color, and hence would function as an optical brightener.

38. Claims 27-30, 33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solutia as applied to claims 19-21, 24-26, 31, 35, 37, and 39 above, and further in view of Murase *et al.* (US 5,445,871), John Radzwill (US 4,177,099), Smith *et al.* (US 5,629,404), or Kawase *et al.* (US 2004/0209031).

39. The applicant further claims a laundry list of polymer matrices, including polyurethane, polycarbonate, polymethyl methacrylate, bisphenol-A-polycarbonate, and polyamide.

40. Solutia explicitly teaches polyvinyl butyral but fails to teach any other polymer matrices.

41. Several polymer are known in the art to be used as windows: polymethyl methacrylate and polycarbonate (Murase *et al.*, ab.), polyurethane (Radzwill, ti.), bisphenol-A-polycarbonate (Smith *et al.*, ll. 4-14), and polyamide (Kawase *et al.*, ab.).

42. Solutia's invention is a visible-light transmitting, IR absorbing polymer matrix. The reason Solutia is adding his nanoscale particle to the matrix is to absorb IR radiation in a window to make the window heat-transmitting-resistive. However, any window could use Solutia's filler to block IR radiation. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to replace Solutia's polyvinyl butyral matrix with any polymer matrix that is known in the art to be used as a major component of windows.

43. Claims 19, 27, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strand *et alli* (US 2002/0176804 A1).

44. Strand teaches a microfluidic substrate assembly (ti.). The substrate can have a polyetheretherketone (PEEK) layer with a dispersed IR absorber material therein (par. 15) to facilitate IR welding (par. 17). The examiner notes that PEEK is a polyetherketone. The IR absorbing material can be zinc oxide or silicon oxide (clm. 26). The applicant claims that the metal oxide comprises 0.001 to 0.01 wt. % of the matrix. Strand fails to teach this concentration of metal oxides. However, given that the amount of IR absorber in this composition directly controls how much IR is absorbed and, therefore, the speed at which the matrix is melted, the amount of IR absorber presented is a result-effective variable. Optimization of result effective variables through routine experimentation is not a patentable distinction. See *In re Beosch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) and MPEP 2144.05 (II) (B).

45. Regarding claim 34, Strand teaches that amorphous PEEK and crystalline PEEK can be different transparencies (par. 15). Therefore, it would have been obvious at the time of the invention for one having ordinary skill in the art to utilize the difference in transparencies to create images on the material for aesthetic purposes or identification purposes. Further, circular “images,” *per se*, are innately created whenever said Strand's material is welded, as welding points change transparency whereas non welding points do not.

46. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strand as applied to claims 19, 27, and 34 above, further in view of Ma *et alli* (Z. Ma, H.

G. Merkus, J. G. A. E. de Smet, C. Heffels, B. Scarlett. "New developments in particle characterization by laser diffraction: size and shape," *Powder Technology* (2000) 111, pp. 66-78.).

47. Regarding claim 2, Strand fails to disclose the range of particles that the applicant has claimed. Ma establishes light diffraction is related to a particle's size (ab.). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Strand *et al*'s invention to optimize the particle size of the IR absorbers to increase transparency of the composition.

48. Claims 20-21, 24-26, 31, 33, and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strand as applied to claims 19, 27, and 34 above, further in view of Solutia.

49. Strand fails to teach the using antimony tin oxide or indium tin oxide as the IR absorber and further fails to teach using nanosized metal oxide IR absorbers. Solutia establishes that a 5 to 100 nm (p. 5, l. 21-25) light-sensitive metal oxide (corresponding to "antimony tin oxide" and "indium tin oxide," p. 8, l. 29; p. 9, l. 7) can be used as IR absorbers. As the particles in Strand and the particles in Solutia are expected to both be useable as IR absorbers, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Solutia's particles in Strand's invention.

50. Regarding claims 20-21, and 31, the metal oxide has a particle size of 5 to 100 nm, p. 5, l. 25).

51. Regarding claim 26, Solutia teaches indium-tin oxide but fails to explicitly mention blue indium-tin oxide. Given that there is a small, mutually-exclusive, mutually-

exhaustive list consisting of the types of indium-tin oxide—yellow (stoichiometric) and blue (non-stoichiometric)—for one with ordinary skill in the art, it would have been obvious to try using blue indium-tin oxide.

52. Regarding claim 35, the applicants claim mixing the metal oxide with the plastic matrix under high shear. It would have been obvious at the time of the invention to one having ordinary skill in the art to mix the PEEK and the metal oxide under high shear conditions to increase the homogeneousness of the mixture.

53. Regarding claim 37, it would have been obvious at the time of the invention to one having ordinary skill in the art to create the applicant's invention using a masterbatch or premixture as the use of masterbatches and premixtures allow manufactures to store precursors cheaper, allowing the creation the composition to occur in stages more readily.

Response to Arguments

54. Applicant's arguments filed 7/11/2008 have been fully considered but they are not fully persuasive. Specifically, applicant argues (A) the purpose of the composition in the Solutia reference is different than the purpose of the composition in the instant application, and hence it would have been nonobvious to lower the amount of metal oxide in the Solutia to arrive at the instant application. The applicant also presents two minor arguments: (B) "claim 34 requires that the plastic materials include a laser inscribed image and there is nothing in any of the references that were cited to suggest this" and (C) as claim 39 uses the language consists of, lanthanum hexaboride, an essential element in the Solutia reference, falls outside of the scope of the claim, and

hence the claim is nonobvious. Further the examiner will comment on statement (D), which discusses that the examiner did not apply art to claim 38.

55. Regarding argument (A), the examiner concurs that the overall purpose of Solutia's invention and the instant invention are different, but the examiner asserts the role of the metal oxide in both applications is as a heat absorber. Specifically, in Solutia, the metal oxide is absorbing IR radiation so that it doesn't as readily get into the car, and in the instant application the metal oxide is absorbing IR radiation to locally heat up and subsequently melt the polymer matrix. The examiner maintains that because the role of the metal oxide is the same (IR absorption) in both cases. Further, although there are alternative methods to decrease the economic cost of reducing the cost of the composition, decreasing the amount of metal oxide nanoparticles is one of said methods. The applicant also argues the Solutia reference suggests the minimal amount of metal oxide is much higher than the applicant's claimed amount. As noted above, the amount of IR material present is a result effective variable, and hence although Solutia prefers more IR absorbing material, it is expected that less IR absorbing material will still cause IR absorption, simply less than Solutia wants for its purpose. However, as the results are expected, an appropriate *prima facie* case of obviousness has been established.

56. Regarding argument (B), the examiner agrees that the amendment to claim 34 and the limitations in the new claim 40 are nonobvious over Solutia standing alone, but new art has been applied to claims 34 and 40.

57. Regarding argument (C), as noted above, lanthanum hexaboride is blue/purple in color and hence it would function as an optical brightener. Therefore, this argument is not persuasive as claim 39 allows for optical brighteners.

58. Regarding statement (D), the examiner has made this office action NON-FINAL as he did not appropriately address claim 38 in the first action.

Examiner's Contact Information

59. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Taylor II whose telephone number is (571) 270-5457. The examiner can normally be reached on 7:30 am to 5:00 pm (off every other Friday).

60. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

61. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James W Taylor II
Examiner
Art Unit 1796

/jwt2/

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796